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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,146	02/28/2004	James E. Rubach		9245

7590 11/15/2006
Richard S. Missimer
PO Box 486
Butler, WI 53007-0486

EXAMINER

NGUYEN, SANG H

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/789,146	Applicant(s) RUBACH, JAMES E.	
	Examiner Sang Nguyen	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

Applicant's response to amendment filed on 08/29/06 has been entered. It is noted that the application contains claims 1-6 and 18 and claims 7-17 have been canceled by the amendment on 08/29/06.

Response to Arguments

Applicant's arguments, see pages 2-6, filed 08/29/06, with respect to the rejection(s) of claim(s) 1-6 and 18 under rejection 102 (b) and 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Spector (U.S. Patent No. 4,099,713).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 and 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarz et al (U.S. Patent No. 5,294,912 submitted by applicant) in view of Spector (U.S. Patent No 4,099,713).

Regarding claim 1; Bednarz et al discloses a method comprising the steps of:

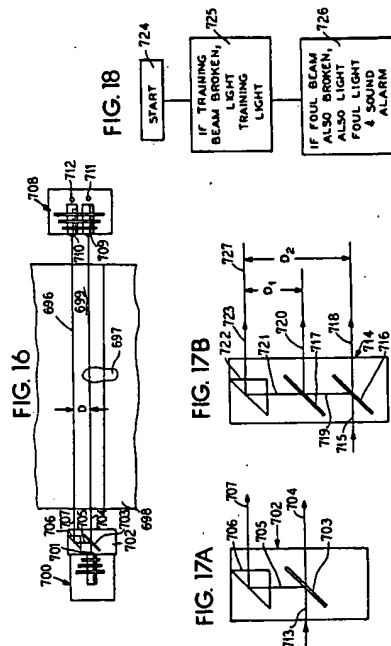
(a) providing a plurality of light beams (704, 707 of figure 16 or 16 of figure 1) from a laser unit (700 of figure 16 or 17 of figure 1);

(b) providing a plurality of light detectors (709, 710 of figure 16) by a detecting device unit (708 of figure 16 or 18 of figure 1) for sensing said plurality of light beams (704, 707 of figure 16);

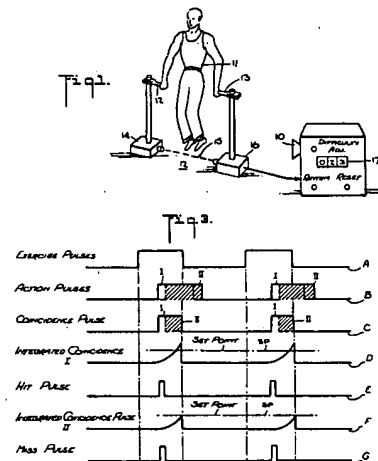
(c) enabling at least one light beam of said plurality of light beams at a time by an LED indicator and a off/on switch (25, 26 of figure 1 and col.4 lines 22-30) of the laser unit (17 of figure 1), enabling at least one light detector (18 of figure 1) corresponding to said at least one light beam (16 of figure 1); and

(d) indicating the presence or absence of each one of said plurality of light beams (704, 707 of figure 16) by the detecting device unit (18 of figure 1 or 708 of figure 16) coupled to a computer (78 of figure 7). See figures 1-18.

U.S. Patent Mar. 15, 1994 Sheet 12 of 12 5,294,912



U.S. Patent July 11, 1978 Sheet 1 of 2 4,099,713



Bednarz et al discloses all of features of claimed invention except for (e) displaying the position of a foot during a jump takeoff. However, Spector teaches that it is known in the art to provide displaying the position of a foot during a jump takeoff (col.2 lines 11-25 and col.3 line 50 to col.4 line 19 and figures 1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with displaying the position of a foot during a jump takeoff as taught by Spector for the purpose of improving accuracy detecting position of body coordination and physical grace.

Regarding claim 5; Bednarz et al discloses storing the presence or absence of each of said plurality of light beams in a memory (figures 6A, 8, 9A-9C, and 10A-10B)

Regarding claim 6; Bednarz et al discloses recalling said presence or absence of each of said plurality of light beams from said memory by a recall switch activation (34, 35, 36, 37 of figure 1 and col.4 lines 34-55).

Claims 2-4 and 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarz et al and Spector as applied to claim 1 above, and further in view of Stroman et al (U.S. Patent No. 5,077,477).

Regarding claim 2; Bednarz et al and Spector discloses all of features of claimed invention except for collimating each one of said plurality of light beams, and collimating each one of said plurality of light detectors. However, Stroman et al teaches that it is known in the art to provide collimating each one of said plurality of light beams (30 of figure 3) by a collimating device (48 of figure 3), collimating each one of said plurality of light detectors (32 of figure 3) by collimating device (42 of figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with collimating each one of said plurality of light beams, and collimating each one of said plurality of light detectors as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Regarding claim 3; Bednarz et al and Spector discloses all of features of claimed invention except for placing an aperture in front of each one of said plurality of light beams and light detectors. However, Stroman et al teaches that it is known in the

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art to provide placing an aperture (40, 46 of figure 3) in front of each one of said plurality of light beams (28 of figure 3) and light detectors (32 of figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with placing an aperture in front of each one of said plurality of light beams and light detectors as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Regarding claim 4; Bednarz et al discloses all of features of claimed invention except for enabling said plurality of light beams and said plurality of light detectors sequentially. However, Stroman et al teaches that it is known in the art to provide enabling said plurality of light beams (28, 30 of figure 3) and said plurality of light detectors sequentially (23, 34 of figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with enabling said plurality of light beams and said plurality of light detectors sequentially as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bednarz et al (U.S. Patent No. 5,294,912 submitted by applicant) in view of Spector (U.S. Patent No 4,099,713) and Stroman et al (U.S. Patent No. 5,077,477).

Regarding claim 18; Bednarz et al discloses a jump takeoff position indicator system, comprising of:

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an infrared light beam emitting device considered to be a laser unit (700 of figure 16 or 17 of figure 1) for emitting a plurality of infrared light beams (704, 707 of figure 16);

an infrared light beam detecting device considered to be a detecting unit a detecting device unit (708 of figure 16 or 18 of figure 1) for sensing the presence of said plurality of light beams (704, 707 of figure 16);

a synchronization means for (figures 6-11) synchronizing the emission of the plurality of infrared light beams (704, 707 of figure 16) with the detection of the light beams by the infrared light beam detecting device;

a memory considered to be a power supply switch (67 of figure 6A) coupled to a low battery detector circuit (72 of figure 6A), LED flasher circuit (71 of figure 6A) and coupled to an auto shut-down circuit (70 of figure 6A) for storing the status of the plurality of infrared light beams (704, 707 of figure 16) at the moment of takeoff of the foot (697 of figure 16); and

a recall switch (34, 35, 36, 37 of figure 1 and col. 4 lines 34-55) of the detecting unit (18 of figure 1) coupled to computer (78 of figure 7) for recalling and displaying the status on the display means, wherein the foot position of a foot (697 of figure 16) during a jump takeoff. See figures 1-18.

Bednarz et al discloses all of features of claimed invention except for a collimating means for collimating the emission and detection of the plurality of infrared light beams. However, Stroman et al teaches that it is known in the art to provide a collimating means (42, 48 of figure 3) for collimating the emission and detection of said

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plurality of infrared light beams . It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with means for collimating the emission and detection of the plurality of infrared light beams as taught by Stroman et al for the purpose of improving accuracy collimated and alignment light beams.

Bednarz et al discloses all of features of claimed invention except for displaying means for displaying the presence or absence of the position of a foot during a jump takeoff . However, Spector teaches that it is known in the art to provide displaying means for displaying the presence or absence of the position of a foot during a jump takeoff (col.2 lines 11-25 and col.3 line 50 to col.4 line 19 and figures 1-3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine method of Bednarz et al with displaying means for displaying the presence or absence of the position of a foot during a jump takeoff as taught by Spector for the purpose of improving accuracy detecting position of body coordination and physical grace.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gould et al (5025476) discloses redotopography apparatus and method.

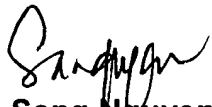
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

November 12, 2006


Sang Nguyen
Patent Examiner
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